CLAIM LISTING

Amendments to the claims are reflected in the following listing, which replaces any and all prior versions and listings of claims in the present application:

Amendments to Claims:

1. (Currently Amended) A method for automated testing of a hand actuated pump, the method comprising the steps of:

providing a continuous source of fluid material to be dispensed by the hand actuated pump;

controlling a pump actuation component to repeatedly actuate the hand actuated pump according to a preprogrammed testing cycle;

catching material dispensed from the hand actuated pump; and

quantifying and recording performance information substantially simultaneous to said controlling; and

adjusting, during said preprogrammed testing cycle, at least one of the following actuation variables: the time between pump actuations, the rate of the actuation, the angle of the actuation, the completeness of the actuation, the interval between pump test actuations, and the number of actuations per pump test cycle.

2. (Original) The method of claim 1, wherein said method further comprises the step of adjusting the orientation of said pump actuation component.

3. (Canceled)

4. (Original) The method of claim 1, wherein said performance information includes at least one of: the amount of material dispensed by the hand actuated pump, the end of life of the pump, the length of life, what caused the end of life of the pump, the resistance of the pump to actuation, and the amount of product drip between test cycles.

5. (Original) The method of claim 1, wherein said performance information includes at least one of the following factors as recorded over time: the force of the spray, the spread of the spray, the distance of the spray, the amount dispensed, and the actuation force.

6. (Previously Presented) The method of claim 4, wherein the amount of material dispensed is measured by one of: the amount of fluid withdrawn from a supply tank, the amount of fluid made up to the supply tank, and the amount of dispensed material in a collection tank.

7. (Original) The method of claim 1, further comprising the step of electronically storing said data in at least one of a spreadsheet and a database.

8. (Previously Presented) The method of claim 1, further comprising the step of alarming on a malfunction of at least one of said hand actuated pump, said controller, said pump actuation component, said continuous source, and a sensor.

9. (Previously Presented) The method of claim 4, further comprising the step of adjusting actuation variables during said preprogrammed testing cycle including at least one of: the number of pump actuations per unit of time, the angle of the actuation, the interval between pump actuations, the force of the actuation, the rate of the actuation, and the completeness of the actuation.

10. (Original) The method of claim 1, further comprising the step of alarming on occurrence of an event.

11. (Previously Presented) A method of testing a hand actuated pump, comprising the steps of: dispensing a liquid drawn from a reservoir;

collecting the liquid from said dispensing step;

recirculating the liquid from said collecting step through the reservoir and the hand actuated pump;

mechanically and repetitively actuating the hand actuated pump according to a preprogrammed testing cycle; and

measuring and recording real-time performance information related to said actuating of the hand actuated pump.

12. (Previously Presented) The method of claim 11 further comprising the step of variably actuating the hand activated pump during at least one of a single pump actuation and a cycle of repeated pump actuations.

13. (Currently Amended) A pump testing system for testing a hand actuated pump, the pump testing system comprising:

a testing station further comprising at least one pump actuation component that is configured to actuate the hand actuated pump;

a supply tank configured to serve as a fluid source for the hand actuated pump;

a collection tank configured to serve as a collection reservoir for material expelled from the hand actuated pump; ~~and~~

a controller configured to automatically control said at least one pump actuation component, wherein said controller is configured to repetitively actuate the hand actuated pump according to a preprogrammed testing cycle; and

a sensor configured to quantify performance information associated with said preprogrammed testing cycle, said performance information including at least one of: the number of actuations, the rate of the pump actuation, the angle of the pump actuation, the completeness of the pump actuation, the interval between pump test cycles, the amount of fluid dispensed by the hand actuated pump, the length of life of the hand actuated pump, what caused the end of life of the pump, and the amount of product drip between pump test cycles.

14. (Original) The pump tester of claim 13, wherein said at least one pump activation component comprises one or more devices that are configured to test at least one of: horizontally actuated pumps, vertically actuated pumps, and pumps that are actuated at other angles.

15. (Original) The pump tester of claim 13, wherein said at least one pump activation component is configured to actuate both push type pumps and pull type pumps.

16. (Original) The pump tester of claim 13, wherein said at least one pump activation component is configured to be variably oriented to change the angle of an actuation force.

17. (Original) The pump tester of claim 13, wherein said controller is configured to record performance information related to said actuating of said pump.

18. (Canceled)

19. (Original) The pump tester of claim 13, wherein said performance information include at least one of the following factors as recorded over time: the force of the spray, the spread of the spray, the distance of the spray, the amount dispensed, and the actuation force.

20. (Original) The pump tester of claim 19, wherein the amount of fluid dispensed is measured by one of: the amount withdrawn from the supply tank, the amount made up to said supply tank, the amount in said collection tank, and the weight of either tank.

21. (Original) The pump tester of claim 13, wherein said controller is further configured to electronically store said data in at least one of a spreadsheet and a database.

22. (Previously Presented) The pump tester of claim 13, wherein said controller is further configured to adjust, according to said preprogrammed testing cycle, at least one of the following: the number of pump actuations per successive pump test cycle, the time between pump actuations, the number of pump actuations per unit of time, the angle of the pump actuation, the interval between successive pump test cycles, the force of the actuation, the rate of the actuation, and the completeness of the actuation.

23. (Original) The pump tester of claim 13, wherein said at least one actuation component is configured to test at least one of: a plunger type pump, a trigger type pump, or a contact-less type of pump.

24. (Original) The pump tester of claim 13, wherein said controller is further configured to alarm on occurrence of an event.

25. (Currently Amended) A pump tester for testing a hand actuated pump, the pump tester comprising:

at least one pump actuation component configured to actuate the hand actuated pump, wherein said hand actuated pump is a wall-mounted pump and wherein said at least one pump actuation component is configured to be automatically controlled by a controller, and wherein said controller is configured to cause said at least one pump actuation component to repetitively actuate the hand actuated pump according to a preprogrammed testing cycle to cause the hand actuated pump to draw a fluid from a supply tank and to expel material into a collection tank.

26. (Canceled)

27. (Previously Presented) The pump tester of claim 25, wherein said controller is configured to measure the force required to move said actuation component a set distance, over multiple actuations.

28. (Previously Presented) The method of claim 1, wherein said quantifying and recording of performance information includes simultaneous quantifying of multiple performance parameters.

29. (Currently Amended) A method for automated testing of a hand actuated pump, the method comprising the steps of:

providing a continuous source of fluid material to be dispensed by the hand actuated pump;

controlling a pump actuation component to repeatedly actuate the hand actuated pump according to a preprogrammed testing cycle;

catching material dispensed from the hand actuated pump;

quantifying and recording performance information substantially simultaneous to said controlling ~~The method of claim 28~~, wherein said quantifying and recording of performance information includes holding a first performance parameter constant while varying a second performance parameter.

30. (Previously Presented) The method of claim 1, where said performance information includes the variation in resistance to actuation over a preprogrammed range of movement of the actuator.

31. (Previously Presented) The method of claim 1, wherein said performance information includes at least one of the amount of product drip during pump actuation and the amount of product drip between successive pump actuations.

32. (Previously Presented) The method of claim 1, wherein said performance information includes the force required to move the actuator through preprogrammed increments of a range of movement.